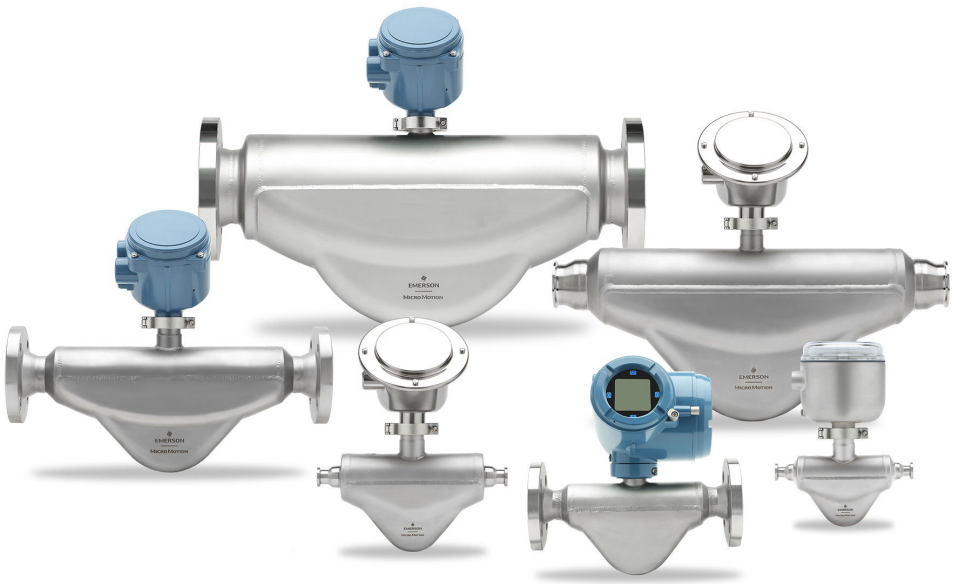
Product Data Sheet
00813-0100-4630, Rev AD
November 2025

Micro Motion™ G-Series Flow and Density Meters



VIEW PRODUCT >

Exceptional reliability and safety

- No moving parts to wear or replace minimizes maintenance for long-term reliability
- Laser-etched tagging for longevity in challenging environments
- Cleanable, self-draining design in vertical or horizontal orientation

Connectivity

- Full range of Micro Motion transmitter options and communication protocols
- Reduced wiring complexity with innovative Wi-Fi, Bluetooth®, 2-wire loop powered, and Power over Ethernet solutions
- Advanced diagnostics including Smart Meter Verification

Ease of Use

- Ultra-compact, lightweight sensor design enables installation flexibility
- Easy installation, integration, and remote monitoring with trusted Micro Motion electronics
- Streamlined sensor options and preselected solutions for ease of ordering

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Measurement principles

As a practical application of the Coriolis effect, the Coriolis mass flow meter operating principle involves inducing a vibration of the flow tube through which the fluid passes. The vibration, though it is not completely circular, provides the rotating reference frame which gives rise to the Coriolis effect. While specific methods vary according to the design of the flow meter, sensors monitor and analyze changes in frequency, phase shift, and amplitude of the vibrating flow tubes. The changes observed represent the mass flow rate and density of the fluid.

Density measurement

The measuring tubes are vibrated at their natural frequency.

A change in the mass of the fluid contained inside the tubes causes a corresponding change to the tube's natural frequency. The frequency change of the tube is used to calculate density.

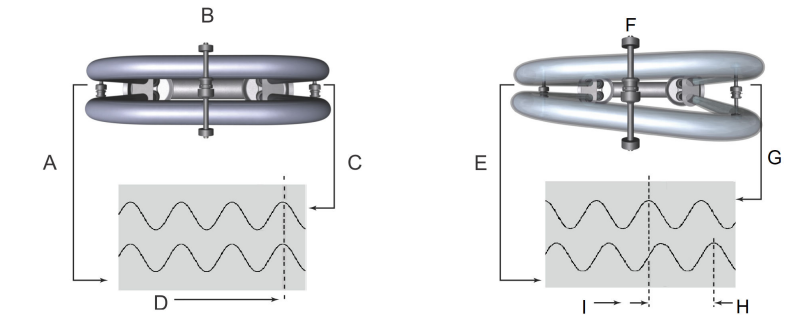
Temperature measurement

Temperature is a measured variable that is available as an output. The temperature is also used internally in the sensor to compensate for temperature influences on Young's Modulus of Elasticity.

Mass and volume flow measurement

The measuring tubes are forced to oscillate producing a sine wave. At zero flow, the two tubes vibrate in phase with each other. When flow is introduced, the Coriolis forces cause the tubes to twist resulting in a phase shift. The time difference between the waves is measured and is directly proportional to the mass flow rate. Volume flow rate is calculated from mass flow rate and the density measurement.

Watch this video to learn more about how a Coriolis flow meter measures mass flow and density (click the link and select **View Videos**): https://www.emerson.com/en-us/automation/measurement-instrumentation/flow-measurement/coriolis-flow-meters.



A. Inlet pick off displacement
B. No flow
C. Outlet pick off displacement
D. Time
E. Inlet pick off displacement
F. With flow
G. Outlet pick off displacement
H. Time difference
I. Time

Meter characteristics

- Measurement accuracy is a function of fluid mass flow rate independent of operating temperature, pressure, or composition. However, pressure drop through the sensor is dependent upon operating temperature, pressure, and fluid composition.
- Specifications and capabilities vary by model and certain models may have fewer available options. For detailed information regarding performance and capabilities, either contact customer service or visit Emerson.com.

Performance specifications

Reference operating conditions

For determining the performance capabilities of our meters, the following conditions were observed / utilized:

- Water at 68 °F (20 °C) to 77 °F (25 °C) and 14.5 psig (1 barg) to 29 psig (2 barg), installed in a tubes-down orientation
- Air and natural gas at 68 °F (20 °C) to 77 °F (25 °C) and 500 psig (34 barg) to 1,450 psig (100 barg), installed in a tubes-up orientation
- Accuracy based on industry leading accredited calibration standards according to International Organization for Standardization (ISO) 17025/IEC 17025
- A density range up to 3,000 kg/m^3 (3 g/cm^3) on all models

Accuracy and repeatability

Accuracy and repeatability on liquids and slurries

Performance specifications	Enhanced	Intermediate	Basic
Mass and volume flow accuracy(1)	±0.1% of rate	±0.15% of rate	±0.25% of rate
Mass and volume repeatability	0.05% of rate	0.075% of rate	0.125% of rate
Density accuracy(2)	±5.00 kg/m^3 (±0.005 g/cm^3)		
Density repeatability	±2.5 kg/m^3 (±0.0025 g/cm^3)		

(1) *Stated flow accuracy includes the combined effects of repeatability, linearity, hysteresis, orientation, and other non-linearities.*
(2) *Liquid density uncertainty of ±0.5 kg/m^3 (±0.0005 kg/cm^3) at reference conditions.*

Accuracy and repeatability on gases

Performance specification	Standard models
Mass flow accuracy(1)	±0.5% of rate
Mass flow repeatability	0.25% of rate

(1) *Stated flow accuracy includes the combined effects of repeatability, linearity, hysteresis, orientation, and other non-linearities.*

Accuracy and repeatability on temperature

Performance specification	Standard models
Temperature accuracy	±1 °C ±0.5% of reading
Temperature repeatability	0.2 °C

Warranty

Warranty options on all G-Series models

The warranty period is generally initiated from the day of shipment. For warranty details, see the *Terms and Conditions* included with the standard product quote.

Base model	Included as standard	Included with start-up service	Available for purchase
G025 - G300	18 months	36 months	> 36 months (customizable length)

Liquid flow rates

Zero stability and minimum flow rate

Zero stability is used when the flow rate approaches the low end of the flow range where the meter accuracy begins to deviate from the stated accuracy. When operating at flow rates where the meter accuracy begins to deviate from the stated accuracy rating, accuracy is governed by the formula:

Accuracy = (zero stability / flow rate) x 100%

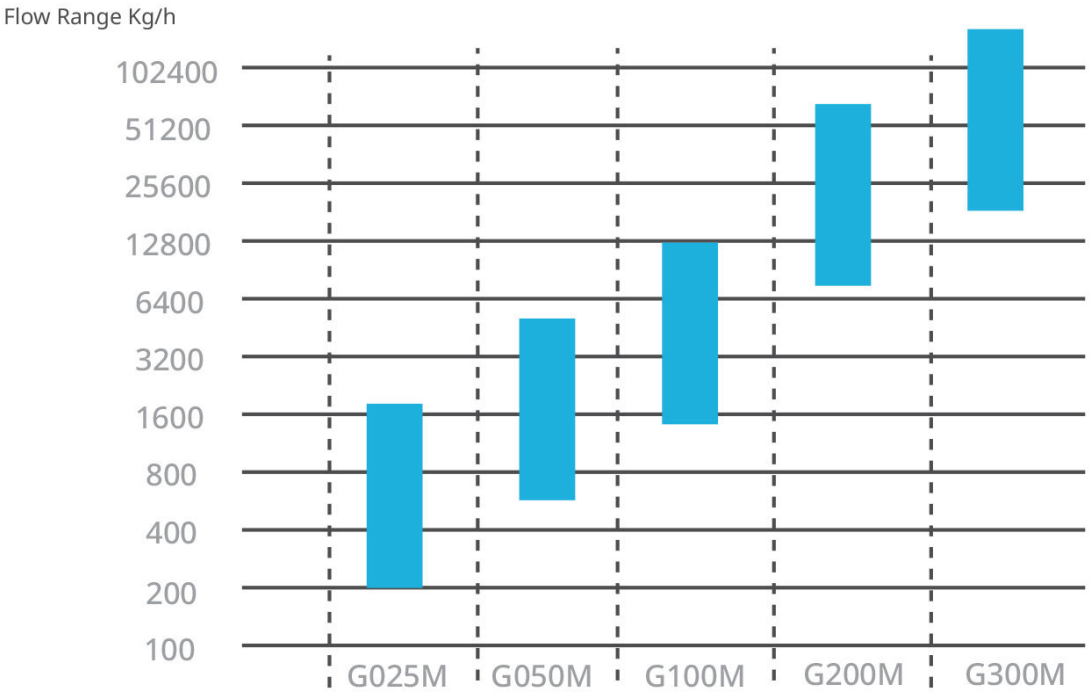
Repeatability is similarly affected by low flow conditions.

Associated minimum flow rates are defined depending on the performance specifications selected.

Nominal flow rate

Micro Motion has adopted the term nominal flow rate, which is the flow rate at which water at reference conditions causes approximately 14.5 psig (1 barg) of pressure drop across the meter. Consult the Flow Measurement Sizing & Selection Tool to evaluate maximum flow rate and pressure drop for your application.

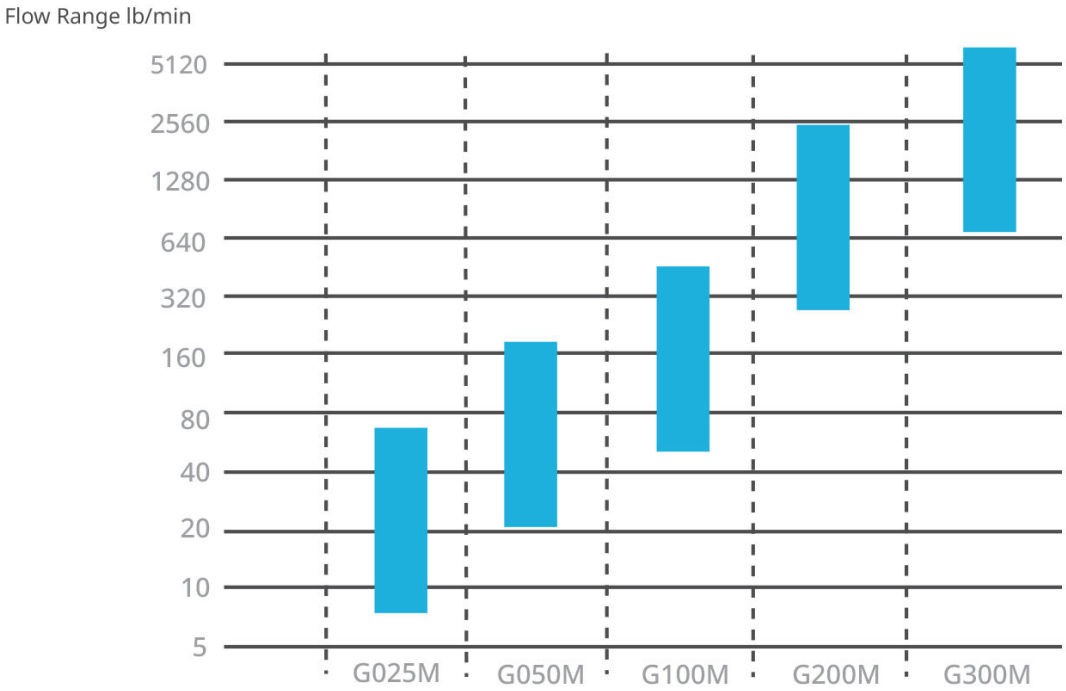
Figure 1: G-Series flow range and performance specifications: metric



Metric

Performance Specifications		G025M	G050M	G100M	G200M	G300M
Nominal Line Size mm		DN6	DN15	DN25	DN50	DN80
Zero Stability Kg/h		0.204	0.572	1.4	7.44	18.4
Min Flow (Kg/h)	Basic 0.25% Accuracy	82	229	558	2,973	7,379
	Intermediate 0.15% Accuracy	136	381	930	4,956	12,300
	Enhanced 0.1% Accuracy	204	572	1,396	7,434	18,450
Nominal Flow kg/h		1,630	4,580	11,200	59,500	148,000

Figure 2: G-Series flow range and performance specifications: imperial



Imperial

Performance Specifications		G025M	G050M	G100M	G200M	G300M
Nominal Line Size in		1/4"	1/2"	1"	2"	3"
Zero Stability lb/min		0.0075	0.021	0.051	0.273	0.678
Min Flow (lb/mn)	Basic 0.25% Accuracy	3	8.4	20.5	109	271
	Intermediate 0.15% Accuracy	5	14	34	182	451
	Enhanced 0.1% Accuracy	7.5	21	51	273	678
Nominal Flow lb/min		60	168	410	2,185	5,420

Gas flow rates

When selecting sensors for gas applications, pressure drop and turndown through the sensor is dependent upon operating temperature, pressure, and fluid composition. Therefore, when selecting a sensor for any particular gas application, Emerson highly recommends that each sensor be sized using the Flow Measurement Sizing & Selection Tool, which will report both the actual velocity and the sonic velocity for each flow rate and meter size considered.

Use the following equation to determine general recommendations on nominal and maximum gas mass flow rates:

$$\dot{m}_{(gas)} = \%M * \rho_{(gas)} * VOS * \frac{1}{4}\pi * D^2 * 2 \text{ (for sensors with dual-tube design)}$$

$\dot{m}_{(gas)}$	Gas mass flow rate
%M	Use Mach number "0.2" for calculating maximum recommended flow rate. When Mach numbers are above 0.3, most gas flows become compressible, and significant increases in pressure drop may occur regardless of measurement device.
$\rho_{(gas)}$	Gas density at operating conditions
VOS	Velocity of sound of the measured gas
D	Internal diameter of the measuring tube

Note
Gas maximum flow rate can never be greater than the maximum liquid rate. Assume that the lower of the two rates is applicable.

Sample calculation

The following calculation is an example of the maximum recommended gas mass flow rate for a G300M measuring natural gas with a molecular weight of 19.5 at 60 °F (16 °C) and 500 psig (34.47 barg):

$$\dot{m}_{(gas)} = 0.2 * 24\ (kg/m^3) * 430\ (m/s) * \frac{1}{4}\pi * .040m^2 * 2$$

$\dot{m}_{(gas)} =$ 34,988 kg/hr; maximum recommended rate for G300M with natural gas at given conditions

%M	0.2 (used for calculating maximum recommended rate)
Gas density	24 kg/m3
$VOS_{(NG)}$	430 m/s (Velocity of Sound of natural gas at given conditions)
G300M tube inner dimension (ID)	40 mm

Process pressure ratings

Sensor maximum working pressure reflects the highest possible pressure rating for a given sensor. Process connection type and environmental and process fluid temperatures may reduce the maximum rating.

All sensors comply with Council Directive 2014/68/EU on pressure equipment.

Process pressure ratings

Model	Pressure
G025M, G050M, G100M, G150M, G200M all models	1,450 psi (100 bar)
G300MM	1,450 psi (100 bar)
G300MS/F	1,000 psi (69 bar)

Case pressure

Case pressure for all models

Model	Case maximum pressure(1)	Typical burst pressure
G025	775 psi (53 bar)	3,100 psi (214 bar)
G050	445 psi (31 bar)	1,780 psi (123 bar)
G150	255 psi (18 bar)	1,020 psi (70 bar)
G200	300 psi (21 bar)	1,200 psi (83 bar)
G300	250 psi (17 bar)	1,000 psi (69 bar)

(1) *Case maximum pressure is determined by applying a safety factor of 4 to typical burst pressure.*

Operating conditions: environmental

Vibration limits

Meets IEC 60068-2-6, endurance sweep, 5 to 2000 Hz up to 1.0 g.

Temperature limits

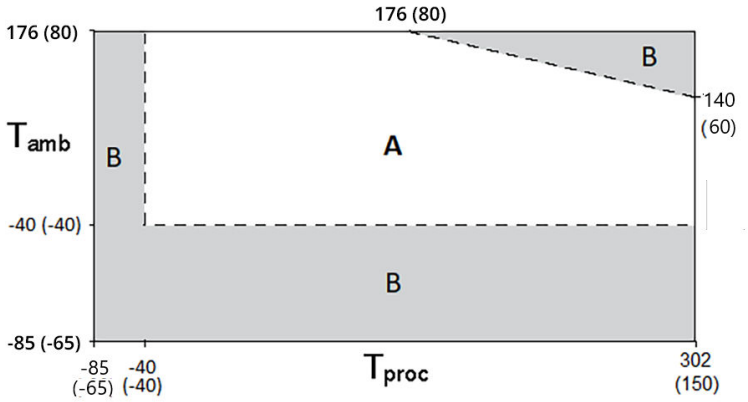
You can use sensors in the process and ambient temperature ranges shown in the temperature limit graphs.

For the purposes of selecting electronics options, only use temperature limit graphs as a general guide. If your process conditions are close to the gray area, consult technical support.

WARNING
Temperature limits may be further restricted by hazardous area approvals that are necessary to avoid potential injury to personnel and damage to equipment. Refer to the hazardous area approvals documentation shipped with the sensor for specific temperature ratings for each model and configuration.

NOTICE
In all cases, the electronics cannot be operated where the ambient temperature is below -40 °F (-40 °C) or above 140 °F (60 °C). If a sensor is to be used where the ambient temperature is outside of the range permissible for the electronics, the electronics must be remotely located where the ambient temperature is within the permissible range, as indicated by the shaded areas of the temperature limit graphs.

Figure 3: Ambient and process temperature limits for all G-Series meters



T_{amb}	Ambient temperature °F (°C)
T_{proc}	Process temperature °F (°C)
A	All available electronic options
B	Remote mount electronics only

Operating conditions: process

Process temperature effect

- For mass flow measurement, process temperature effect is defined as the change in sensor flow accuracy specification due to process temperature change away from the calibration temperature. Temperature effect on flow can be corrected by zeroing at normal operating temperature. Use the Zero Verification tool to optimize the zero calibration.
- For density measurement, process temperature effect is defined as the change in density accuracy specification due to process temperature change away from the calibration temperature.

Process temperature effect for all models

Model	Mass flow	Density	
	% of nominal mass flow rate per °C	g/cm^3 per °C	kg/m^3 per °C
G025, G050, G100, G200, G300	±0.0014	±0.0003	±0.3

Process pressure effect

Process pressure effect is defined as the change in sensor mass flow and density accuracy specification due to process pressure change away from the calibration pressure. This effect can be corrected by dynamic pressure input or a fixed meter factor. See the calibration sheet for the specific meter pressure compensation coefficient. If no pressure compensation coefficient is provided, use the typical values listed in the table below. For proper setup and configuration, see the transmitter's configuration and use manual at Emerson.com.

Process pressure effect for all models

Model	Mass flow (% of rate)		Density	
	per psi	per bar	g/cm^3 per psi	kg/m^3 per bar
G025	None	None	-0.000003	-0.041
G050	None	None	-0.000035	-0.051
G100	None	None	-0.0000145	-0.21
G200	None	None	-0.00001	-0.148
G300	-0.0014	-0.0203	-0.000005	-0.074

Viscosity range

For installations with 3-inch (DN80) or larger meters, and fluid viscosities greater than 500 centistokes (cSt), consult your Emerson sales representative or technical support for guidance on optimizing your configuration. This recommendation is not applicable for smaller meters or process with viscosities less than 500 cSt.

Pressure relief

G-Series sensors are available with a rupture disk installed on the case.

When the process fluid pressure is higher than the case burst pressure, the use of a rupture disk is recommended.

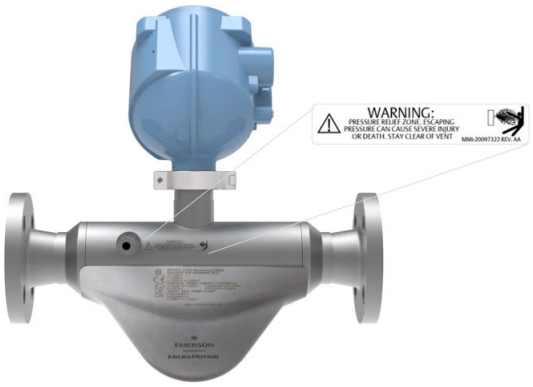
For high pressure sensor models, Micro Motion has standardized rupture disks on all sensor cases. For other models, the end user must determine the suitability of a rupture disk for their application.

Some customers connect a pipeline to the rupture disk to help contain escaping process fluid. Customers must determine if this is needed for their application.

Be aware when other devices are connected to this same rupture disk pipeline, and they experience a venting of the process fluid, or there is any other substantial increase in pressure in this piping system, there is a possibility the Coriolis meter rupture disk may burst unintentionally from this externally applied pressure. Follow local piping and safety protocols regarding safe pressure relief management.

The standard rupture activation pressure is 63.8 psig (4.4 barg). For more information about rupture disks, contact customer service.

Figure 4: Rupture disk on the G-Series



WARNING

High-pressure fluid escaping from the sensor can cause severe injury or death

- Orient the sensor so that personnel and equipment will not be exposed to any discharge along the pressure relief path.
- Stay clear of the rupture disk pressure relief area.

Important

When using a rupture disk, the housing can no longer assume a secondary containment function.
Keep the rupture disk installed at all times, as it would otherwise be necessary to re-purge the case.

If the rupture disk is activated by a tube breach, the seal in the rupture disk will be broken. If this happens, remove the Coriolis meter from service.

NOTICE

Removing the purge fitting, blind plug, or rupture disks compromises the Ex-i Safety Certification, the Ex-tc Safety Certification, and the ingress protection (IP)-rating of the Coriolis meter. Any modification to the purge fitting, blind plug, or rupture disks must maintain a minimum of IP66/IP67 Ratings.

Hazardous area classifications

Note
Find the current hazardous area classifications certificates at Emerson.com.
Scroll down to **Documents & Drawings** and click **Certificates & Approvals**.

Type	Approval or certification (typical		
CSA and CSA C-US	All G Series models with integral junction box	Ambient temperature: -31 to +176 °F (-35 to +80 °C)	
		Class I, Div. 1, Groups C and D	
		Class I, Div. 2, Groups A, B, C, and D	
		Class II, Div. 1, Groups E, F, and G	
		Class II, Div. 2, Groups F and G	
	All G Series models with integral core processor	Ambient temperature: -40 to +140 °F (-40 to +60 °C)	
		Class I, Div. 1, Groups C and D	
		Class I, Div. 2, Groups A, B, C, and D	
		Class II, Div. 1, Groups E, F, and G	
		Class II, Div. 2, Groups F and G	
	All G Series models with integral transmitter(1)	Ambient temperature: -85 to +176 °F (-65 to +80 °C)	
		Class I, Div. 1, Groups A, B, C, and D	
		Class I, Div. 2, Groups A, B, C, and D	
		Class II, Div. 1, Groups E, F, and G	
		Class II, Div. 2, Groups F and G	
ATEX	All G Series models with integral junction box	CE 2460 Ex	Ambient temperature: -31 to +176 °F (-35 to +80 °C)
			II 1/2G Ex ib IIC T6...T3 Ga/Gb
	All G Series models with integral core processor	CE 2460 Ex	Ambient temperature: -40 to +140 °F (-40 to +60 °C)
			II 1/2G Ex ib IIC T5...T3 Ga/Gb
	All G Series models with integral transmitter(2)	CE 2460 Ex	Ambient temperature: -85 to +176 °F (-65 to +80 °C)
			II 1G Ex ia IIC T6...T3 Ga
			II 1D Ex ia IIIC T*°C Da
		CE Ex	Ambient temperature: -85 to +176 °F (-65 to +80 °C)
			II 3G Ex ec IIC T6...T3 Gc
			II 3D Ex tc IIIC T*°C Dc
IECEx	All G Series models with integral junction box	Ambient temperature: -31 to +176 °F (-35 to +80 °C)	
		Ex ib IIC T6...T3 Ga/Gb	
	All G Series models with integral core processor	Ambient temperature: -40 to +140 °F (-40 to +60 °C)	
		Ex ib IIC T5...T3 Ga/Gb	
	All G Series models with integral transmitter(3)	Ambient temperature : -85 to +176 °F (-65 to +80 °C)	
		Ex ib IIC T6...T3 Ga	

Type	Approval or certification (typical	
		Ex ia IIIC T*°C Da IP66/IP67
		Ex ec IIC T6...T3 Gc
		Ex tc IIIC T*°C Dc IP66/IP67
Ingress protection rating	IP66/67 with junction box or type 800 core processor	
	IP64 with integral transmitters	
EMC effects	Complies with EMC Directive 2014-30-EU per EN 61326 Industrial	
	Complies with NAMUR NE 21 Edition 2017-08-01	

(1) *Transmitter certification markings may be more restrictive than certification markings of the sensor. Refer to CSA Transmitters Certificate.*
(2) *Transmitter certification markings may be more restrictive than certification markings of the sensor. Refer to ATEX Transmitters Certificate.*
(3) *Transmitter certification markings may be more restrictive than certification markings of the sensor. Refer to IECEx Transmitter Certificate.*

Industry standards

Type	Standard
Industry standards and commercial approvals	■ NAMUR: NE 80, NE 95, NE 131, NE 132 ■ Pressure Equipment Directive (PED) ■ Dual Seal ■ Safety Integrity Level SIL 2 and SIL 3 capable (when used with an approved Micro Motion transmitter) ■ ASME 31.3 processing piping code
Hygienic approvals (when ordered with hygienic process connections)	■ EHEDG certified ■ 3-A authorized ■ ASME® BPE design compliant ■ TSE/BSE free

Note

- Unless otherwise noted, approvals shown are for G-Series meters configured with a core processor for remote 4-wire connection to a Micro Motion transmitter.
- When a meter is ordered with hazardous area approvals, detailed information is shipped along with the product.

Connectivity

G-Series sensors are highly customizable to provide a configuration that is tailor-fit to specific applications.

For help determining which Micro Motion products are right for your application, see the resources at Emerson.com.

Communication and diagnostic information

Transmitter interface

- Analog and digital options, including 2-wire looped power, Power-over-Ethernet, and options up to five fully configurable input/output (I/O) channels
- Wi-Fi and Bluetooth® display options for wireless configuration
- Integral field mount, remote field mount, and DIN rail control room mounting options

Diagnostic data

- Smart Meter Verification — checks the health and integrity of the meter's tubes, electronics, and calibration without interrupting the process
- Zero verification — quickly diagnoses the meter to determine if re-zeroing is recommended, and if process conditions are stable and optimal for zeroing
- Multiphase detection — proactively identifies multiphase process conditions and severity
- Time-stamped digital audit trails and reports for optimized agency compliance

SMART METER VERIFICATION

Communication protocols

Typical input/output I/O connectivity options include:

- 4-20 mA
- HART®
- 10k Hz pulse
- *Wireless*HART® with THUM adapter
- Wi-Fi and Bluetooth® display options
- EtherNet/IP™
- Modbus® transmission control protocol (TCP)
- FOUNDATION™ Fieldbus
- PROFINET®
- PROFIBUS®-PA
- PROFIBUS-DP
- Discrete I/O

Transmitter compatibility and primary attributes

For a complete list of all transmitter configurations and options, see the transmitter product data sheets and other resources available at Emerson.com.

Model	Transmitter					
	1500/2500	1600	1700/2700	4200	4700	5700
						
Power						
AC			•		•	•
DC	•	•	•		•	•
Loop powered (2-wire)				•		
Diagnostics						
Smart Meter Verification (SMV) basic (included)	•	•	•	•	•	•
SMV Pro	•	•	•	•	•	•
Real time clock		•		•	•	•
Onboard data historian		•		•	•	•
Local operator interface						
2-line display			•			
Graphical display		•		•	•	•
Certifications and approvals						
SIS certified			•	•	•	•
Installation options						
Integral mount		•	•	•	•	
Remote mount	•	•	•	•	•	•

Physical specifications

Materials of construction

General corrosion guidelines do not account for cyclical stress and therefore should not be relied upon when choosing a wetted material for your Micro Motion meter.

For material compatibility information, see the Micro Motion Corrosion Guide.

Wetted path materials

Model	Stainless steel		Sensor weight(1)
	316/316L and 317/317L	316/316L	
G025	•		8 lb. (3.6 kg)
G050	•		10 lb. (4.5 kg)
G100	•		12 lb. (5.4 kg)
G200		•	40 lb. (18.1 kg)
G300		•	77 lb. (34.9 kg)

(1) *Weight specifications are based upon ASME B16.5 CL150 flange and do not include electronics.*

Non-wetted part materials

Component	Enclosure rating(1)	300 series stainless steel	Polyurethane-painted aluminum
Sensor housing	Type 4X (IP 66/67)	•	
Core processor housing	Type 4X (IP 66/67)	•	•
Junction box	Type 4X (IP 66/67)	•	•
Transmitter housing(2)	Type 4X (IP 66/67)	•	•

(1) *Ingress protection rating might be further restricted by the hazardous area approvals selected. Please refer to the hazardous area documentation or consult a technical representative.*
(2) *Material of construction and surface finish options vary by model. For available options, see the transmitter Product Data Sheet.*

Flow tube information

Model	Number of tubes	Tube inside diameter		Tube length	
		Inches	mm	Inches	mm
G025	2	0.21	5.3	8.81	216
G050	2	0.33	8.5	10.9	276
G100	2	0.51	13	11.7	296
G200	2	1.1	27	21.4	545
G300	2	1.6	40	23.5	597

Process connections

Sensor type	Flange type
Stainless steel 316L	■ ASME B16.5 compatible raised face flange (up to CL600) ■ EN 1092-1 compatible weld neck flange Type B1 (up to PN100) ■ Jis B2220 compatible weld neck raised face (up to 10K) ■ Hygienic Tri-Clamp® compatible ■ VCO, VCR Swagelok®-compatible fitting VCO fittings include the Viton® O-ring as a wetted part)

Note
For flange compatibility, refer to Flow Measurement Sizing & Selection Tool tool.

Dimensions

These dimensions are intended to provide a basic guideline for sizing and planning. For complete and detailed dimensional drawings, access the Micro Motion Dimensional Drawings tool at MyEmerson.

Note
- Accuracy = ±0.12 in (±3.0 mm)
- These drawings are representative of a 316 stainless steel model fitted with an ASME B16.5 CL150 flange, and 800 enhanced core electronics.

Example dimensions for G-Series models

Figure 5: G-Series models dimensions

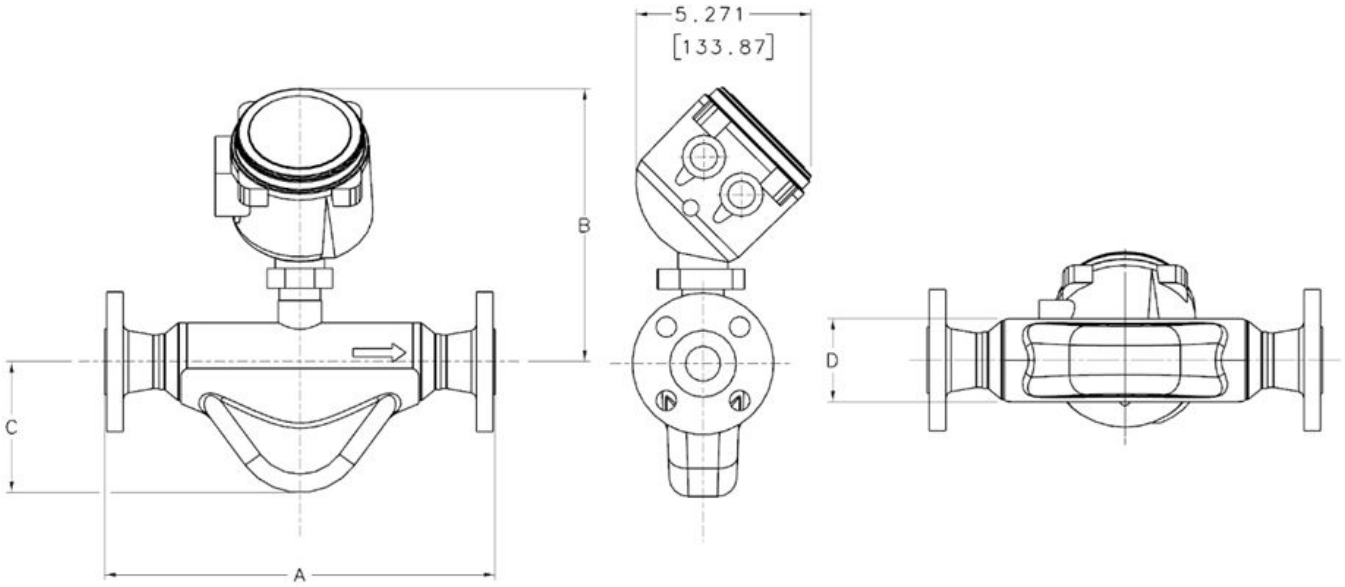


Table 1: Sample dimensions in inches

	Dim. A					
Model	**ASME B16.5 CL150**	**EN1092 PN40**	**NAMUR NE132 flange to flange length**	**Dim. B w/Integral 800 Core**	**Dim. C**	**Dim. D**
G025	8.05	8.27	20.08	8.03	3.18	2.00
G050	9.82	9.94	20.08	8.30	3.86	2.50
G100	11.83	11.53	23.62	8.30	3.98	2.50
G200	20.73	20.85	28.15	9.11	7.40	4.26
G300	22.94	23.01	36.02	9.89	7.45	5.77

Table 2: Sample dimensions in mm

	Dim. A					
Model	**ASME B16.5 CL150**	**EN1092 PN40**	**NAMUR NE132 flange to flange length**	**Dim. B w/Integral 800 Core**	**Dim. C**	**Dim. D**
G025	204	210	510	204	81	51
G050	249	252	510	211	98	64
G100	300	293	600	211	101	64
G200	526	529	715	231	188	108
G300	583	584	915	251	189	147

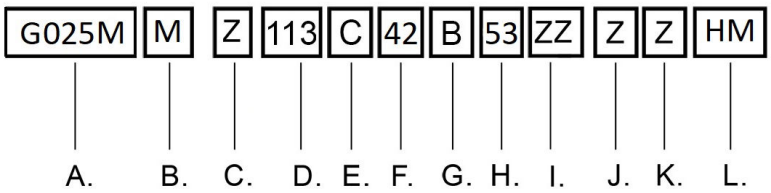
Ordering information

To select and build your meter, please refer to the Flow Measurement Sizing & Selection Tool.

To jump directly to configuration options, go to Emerson.com to access the G-Series family page in order to view options and build your meter.

Model code structure

The sensor is shipped with a model code stamp so that after purchase, you can verify the ordering codes.



A. Sensor base model
B. Wetted surface finish
C. Pre-selected option
D. Process connection
E. Case option
F. Electronics interface
G. Conduit connection
H. Approval
I. Future option
J. Calibration option
K. Factory options
L. Certificates, tests, calibrations, and services (not required)

Base model

Model	Product description
G025M	Micro Motion G-Series Coriolis Meter, ¼ inch (DN6), 316L stainless steel
G050M	Micro Motion G-Series Coriolis Meter, ½ inch (DN15), 316L stainless steel
G100M	Micro Motion G-Series Coriolis Meter, 1 inch (DN25), 316L stainless steel
G200M	Micro Motion G-Series Coriolis Meter, 2 inch (DN50), 316L stainless steel
G300M	Micro Motion G-Series Coriolis Meter, 3 inch (DN80), 316L stainless steel

Wetted surface finish

Code	Wetted surface finish
M	Standard finish
S(1)(2)	30 Ra (0.76 um) finish
F(1)(2)	15 Ra (0.38 um) finish

(1) *3A authorized and EHEDG certified sensor when wetted surface finish codes S or F are ordered.*
(2) *Wetted surface finish S & F are not available with Case option D (Rupture disk).*

Preselected options

Code	Description
Z	Standard sensor, selectable model code

Process connections

Available with wetted surface finish code M

Code	Description					
113[1]	½ in	CL150	ASME B16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
114	½ in	CL300	ASME B16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
121	½ in	Tri-Clamp compatible	ASME BPE	316L	Hygienic fitting	
128[1]	1-inch	CL150	ASME B16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
129	1-inch	CL300	ASME B16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
130	1-inch	CL600	ASME B16.5 compatible	316L	Weld neck compatible flange	Raised face
138	1-inch	Tri-Clamp compatible	ASME BPE	316L	Hygienic fitting	
209	2-inch	CL150	ASME B16.5 compatible	F316/316L	Weld neck flange	Raised face
239	#12			316/316L	O-ring face seal fitting	¾-inch 316L NPT female adapter
319	#8			316/316L	Weld neck flange	½-inch 316 NPT female adapter
322	¾-inch	Tri-Clamp compatible	ASME BPE	316L	Hygienic fitting	
352	2-inch	Tri-Clamp compatible	ASME BPE	316L	Hygienic fitting	
355[1]	3-inch	CL150	ASME B16.5 compatible	F316/316L	Weld neck flange	Raised face
E72	3-inch	Tri-Clamp compatible	ASME BPE	316L	Hygienic fitting	
418[1]	2-inch	CL150	ASME B16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
419	2-inch	CL300	ASME B16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
420	2-inch	CL600	ASME B16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
A37	3-inch	CL300	ASME B16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
B04	1-inch	CL150	ASME B16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face

Code	Description					
B21	2-inch	CL300	ASME B16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
B22	2-inch	CL600	ASME B16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
B81	#16			316/316L	O-ring face seal fitting	1-inch 316 NPT female adapter
E53	DN15	PN40	EN 1092-1 compatible	F316/F316L	Weld neck compatible flange	Type B1 - NAMUR compliant lay length (510mm)
E54	DN15	PN40	EN 1092-1 compatible	F316/F316L	Weld neck compatible flange	Type B1 - NAMUR compliant lay length (510mm)
E55	DN25	PN40	EN 1092-1 compatible	F316/F316L	Weld neck compatible flange	Type B1 - NAMUR compliant lay length (600mm)
E56	DN50	PN40	EN 1092-1 compatible	F316/F316L	Weld neck flange	Type B1 - NAMUR compliant lay length (715mm)
E57	DN80	PN40	EN 1092-1 compatible	F316/F316L	Weld neck compatible flange	Type B1 - NAMUR compliant lay length (915mm)

(1) *Selected with preselected options code I.*

Low-volume process connections

Available with Wetted Surface Finish Code M

Note
Consult factory for lead time.

Code	Description					
122	15mm	20K	JIS B 2220 compatible	F316/F316L	Weld neck compatible flange	Raised face
172	DN25	PN40	EN 1092-1 compatible	F316/F316L	Weld neck compatible flange	Type B1
176(1)	DN15	PN40	EN 1092-1 compatible	F316/F316L	Weld neck compatible flange	Type B1
139	25mm	20K	JIS B 2220 compatible	F316/F316L	Weld neck compatible flange	Raised face
179(1)	DN25	PN40	EN 1092-1 compatible	F316/F316L	Weld neck compatible flange	Type B1
356	3-inch	CL300	ASME BPE 16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
357	3-inch	CL600	ASME BPE	F316/F316L	Weld neck compatible flange	Raised face
369(1)	DN50	PN40	EN 1092-1 compatible	F316/F316L	Weld neck flange	Type B1
371(1)	DN80	PN40	EN 1092-1 compatible	F316/F316L	Weld neck compatible flange	Type B1
372	DN100	PN40	EN 1092-1 compatible	F316/F316L	Weld neck compatible flange	Type B1
386	50mm	10K	JIS B 2220 compatible	F316/F316L	Weld neck flange	Raised face
400	80mm	10K	JIS B 2220 compatible	F316/F316L	Weld neck compatible flange	Raised face
425	4-inch	CL150	ASME BPE 16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
426	4-inch	CL300	ASME BPE 16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
427	4-inch	CL600	ASME BPE	F316/F316L	Weld neck compatible flange	Raised face
A36	3-inch	CL150	ASME B16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
A38	3-inch	CL600	ASME B16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
B17	1-½-inch fitting	CL150	ASME B16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face

(1) *Selected with preselected options Code M.*

Hygienic process connections

Available with Wetted Surface Finish Code S or F

Code	Description					
E58	½ -inch	CL150	ASME BPE 16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
E59	½ -inch	CL300	ASME BPE 16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
121(1)	½ -inch	Tri-Clamp compatible	ASME BPE	316L	Hygienic fitting	
E60	3-inch	Tri-Clamp compatible	ASME BPE	316L	Hygienic fitting	Raised face
E61	3-inch	CL150	ASME BPE 16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
E62	3-inch	CL300	ASME BPE 16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
E63(1)	3-inch	Tri-Clamp compatible	ASME BPE	316L	Hygienic fitting	Raised face
E64	3-inch	CL150	ASME BPE 16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
E65	3-inch	CL300	ASME BPE 16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
E66	3-inch	Tri-Clamp compatible	ASME BPE	316L	Hygienic fitting	Raised face
E67	3-inch	CL150	ASME BPE 16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
E68	3-inch	CL300	ASME BPE 16.5 compatible	F316/F316L	Weld neck compatible flange	Raised face
E69(1)	3-inch	Tri-Clamp compatible	ASME BPE	316L	Hygienic fitting	Raised face
E70	3-inch	CL150	ASME BPE 16.5 compatible	F316/F316L	Weld neck compatible	Raised face
E71	3-inch	CL300	ASME BPE 16.5 compatible	F316/F316L	Weld neck compatible	Raised face
E72(1)	3-inch	Tri-Clamp compatible	ASME BPE	316L	Hygienic fitting	Raised face

(1) *Selected with preselected options code P.*

Horizontally drainable hygienic process connections

Available with wetted surface finish code S or F

Code	Description					
E73	¾-inch	Tri-Clamp compatible	ASME BPE	316L	Drainable hygienic fitting	tbd
E74	1-inch	Tri-Clamp compatible	ASME BPE	316L	Drainable hygienic fitting	tbd
E76	2-inch	Tri-Clamp compatible	ASME BPE	316L	Drainable hygienic fitting	tbd
E77	3-inch	Tri-Clamp compatible	ASME BPE	316L	Drainable hygienic fitting	tbd

Case options

Code	Case option
C[(1)(2)]	Standard case
D	Standard case with rupture disk

(1) *Selected with preselected options Code P.*
(2) *Selected with preselected options Codes M, I.*

Electronics interface

Code	Description
42	4-wire polyurethane-painted aluminum integral enhanced core processor for remote mount transmitters
43	4-wire stainless steel integral enhanced core processor for remote mount transmitters
46	MVD Solo; polyurethane-painted aluminum integral enhanced core processor (for OEMs)
47	MVDSolo; stainless steel integral enhanced core processor (for OEMs)
9R	9-wire polyurethane-painted aluminum junction-box
9S	9-wire 316L stainless steel junction-box
IC	1700 integral mount transmitter
UA	4200 integral mount aluminum housing
UF	1600 integral mount aluminum housing
UH[(1)]	1600 integral mount stainless steel housing
UK[(2)]	4700 Integral Mount Aluminum Housing

(1) *Selected with preselected options Code P.*
(2) *Selected with preselected options Codes M, I.*

Conduit connections

Code	Description
Available with Electronics Interface Codes 42, 43, 46, 47	
B	½-in NPT - no gland
E	M20 - no gland
F	Brass nickel cable gland (cable diameter 0.335 to 0.394 inches [8.5 to 10 mm])
G	Stainless steel cable gland (cable diameter 0.335 to 0.394 inches [8.5 to 10 mm])
Available with Electronics Interface Codes 9R, 9S	
A	¾-inch NPT - no gland
H	Brass nickel cable gland
J	Stainless steel cable gland
Available with Electronics Interface Codes IC, UA, UF, UH, UK	
A	No gland

Approvals options

Code	Description
Available with Electronics Interface Codes 42, 43, 9R, 9S	
MM	Micro Motion Standard (no approval, without CE/EAC markings)
MN	Micro Motion Standard / PED compliant (with CE/EAC markings)
51	Zone 1 Div 1 ATEX, CSA, IECEX
T1	CML zone 1
P1	NEPSI zone 1
Available with Electronics Interface Codes 46, 47 (MVD Solo with I.S. Barrier)	
MM	Micro Motion Standard (no barrier included, without CE/EAC markings)
MN	Micro Motion Standard (PED compliant, (no barrier included, with CE/EAC markings)
51	Zone 1 Div 1 ATEX, CSA, IECEX
T1	CML zone 1
P1	NEPSI zone 1
Available with Electronics Interface Codes UF, UH	
MM	Micro Motion standard (no approval, without CE/EAC markings)
MN	Micro Motion standard / PED compliant (with CE/EAC markings)
53[(1)]	Zone 2 Div 2 ATEX, CSA, IECEX
T3	CML zone 2
P3	NEPSI zone 2
Available with Electronics Interface Codes IC, UA, UK)	
MM	Micro Motion standard (no approval, without CE/EAC markings)
MN	Micro Motion standard / PED compliant (with CE/EAC markings)
53	Zone 2 Div 1 ATEX, CSA, IECEX

Code	Description
51[2]	Zone 1 Div 1 ATEX, CSA, IECEX
T1	CML zone 1
T3	CML zone 2
P1	NEPSI zone 1
P3	NEPSI zone 2

(1) *Selected with preselected options code P.*
(2) *Selected with preselected options M, I.*

Future options

Code	Future options
ZZ	Reserved for future use

Calibration

Code	Calibration option
Z[1][2]	0.25% mass flow and0.005 g/cc density calibration
A	0.15% mass flow and 0.005 g/cc density calibration
1	0.10% mass flow and 0.005 g/cc density calibration

(1) *Selected with preselected options code P.*
(2) *Selected with preselected options code M,I.*

Factory options

Code	Description
Z	Standard

Certificates, tests, calibrations, and services (not required, all optional)

These option codes can be added to the end of the model code if needed, but no code is required when none of these options is selected.

There may be additional options or limitations depending on total meter configuration. Contact a sales representative before making your final selections.

Material quality examination tests and certificates

Select any.

Code	Description
HM	Hydrostatic test certificate 3.1 and material inspection certificate 3.1 (supplier lot traceability per EN 10204)

Code	Description
Radiographic Testing (select only one from this group):	
RE	X-ray package 3.1 (sensor process connection only; radiographic examination certificate; weld map; radiographic Inspection NDE qualification)
RT	X-ray package 3.1 (sensor process connection only; radiographic examination certificate with digital image; weld map; radiographic Inspection NDE qualification)
Weld examination	
WP	Weld procedure package (weld map, weld procedure specification, weld procedure qualification record, welder performance qualification)
Dye penetrant examination	
D1	Dye penetrant test package 3.1 (sensor process connection only; liquid dye penetration NDE qualification)
Positive Material Testing (select only one from this group):	
PM	Positive material test certificate 3.1 (without carbon content)
PC	Positive material test certificate 3.1 (including carbon content)
Instrument tagging	
TM	China Pattern Approval (CPA) tagging (Mandatory for end destination China)
TW	Wired on tag, 5 lines text, maximum 32 characters per line, 6mm character height, 316 stainless steel

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For more information: **Emerson.com/global**

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